

Rabbit Polyclonal Anti-p75 NGF Receptor antibody

Catalog Number: P75NTR-101AP

Lot Number:

General Information

Product	p75 NGF Receptor Antibody
Description	p75 neurotrophin receptor a-2 Antibody Affinity Purified
Accession #	Uniprot: Q9PRG7 GenBank: AAD51031.1
Verified Applications	CM, ELISA, ICC, IF, IHC, IP, WB
Species Cross Reactivity	Human, Mouse, Rat
Host	Rabbit
Immunogen	Synthetic peptide corresponding to unique amino acid sequence on P-75NTR protein.
Alternative Nomenclature	CD271 antibody, Gp80 LNGFR antibody, Low affinity neurotrophin receptor p75NTR antibody, Nerve growth factor receptor antibody, NGFR antibody, p75 ICD antibody, p75 Neurotrophin receptor antibody, p75 NTR antibody, TNFR Superfamily Member 16 antibody, TNFRSF16 antibody, Tumor necrosis factor receptor superfamily member 16 antibody

Physical Properties

Quantity	100 µg
Volume	200 µl
Form	Affinity Purified Immunoglobulins
Immunoglobulin & Concentration	.50-.95 mg/ml IgG in antibody stabilization buffer
Storage	Store at -20°C for long term storage.

Recommended Dilutions

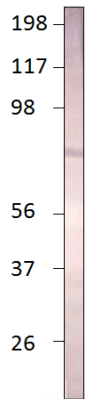
DOT Blot	1:10,000
ELISA	1:10,000
Immunocytochemistry	1:200
Immunofluorescence	1:200
Immunohistochemistry	1:200
Immunoprecipitation	1:200
Western Blot	1:500

Related Products

Catalog

FITC-Conjugated	P75NTR-FITC
Antigenic Blocking Peptide	P-P75NTR
Western Blot Positive Control	PC-P75NTR

Application Verification:



WB of P75NTR-101AP with PC-P75NTR. 1:750 antibody dilution in DiluObuffer.

Dilutions are for reference only. Applications not listed above are not necessarily precluded from working with this antibody. Investigators intending to use an application that has not been verified can request a complimentary sample.

Overview:

The pan-neurotrophin receptor p75NTR belongs to a large family of receptors, which includes tumor necrosis factor receptors (TNF), Fas, and approximately 25 other members. The p75NTR is the first receptor to be cloned and has shown significant advancement in its understanding of signaling pathways activated by p75NTR and its potential biological functions. P75NTR has surprisingly diverse effects, ranging from cell death to regulation of axon elongation. This diversity in its physiological effects can be explained by the complex formation of p75NTR with other receptors and multiple signaling molecules that interact with the intracellular domain of p75NTR (1). Neuronal survival, differentiation, and myelination also involves p75NTR signaling via Trk receptor kinases. Identification of new ligands, cytosolic interacting partners, receptor cleavage products and coreceptors for the p75NTR led to greater understanding of p75NTR signaling (2).

Nerve growth factor (NGF) is synthesized by various structural and inflammatory cells and activates Tropomyosin-receptor kinase A (TrkA) and the p75NTR receptor; both belong to the "death receptor" family. One of the several diverse effects of p75NTR signaling is neuronal apoptosis that requires interaction of neurotrophin receptor interacting factor (NRIF) with c-Jun-N-terminal kinase (JNK) and p53 activation (3). The p75NTR has been characterized as a tumor suppressor in human prostate cancer. Administration of the p75NTR gene into subcutaneous PC-3 xenografts suppressed in a dose-dependent manner the growth of tumors (4). P75NTR has multiple functional domains including a NTRF and a C-terminal Death domain.

The p75NTR-selective antibodies were generated using unique peptides from near N-terminal portion of the p75NTR protein. The p75NTR-selective antibodies were affinity purified against immobilized antigen based affinity chromatography and are represented as pure IgG fractions stabilized in antibody stabilization buffer. Synthetic blocking peptides and western blot positive controls are available. The polyclonal antibodies strongly label a 76 kDa in PC-P75NTR samples. Antibodies can be conjugated to fluorescent probes or secondary enzymes upon request at extra charge. FabGennix carries antibodies against other diagnostic/neomarkers, for a full product listing please visit <http://fabgennix.com>.

References:

1. Yamashita T, Fujitani M, Hata K, Mimura F, Yamagishi S. Diverse functions of the p75 neurotrophin receptor. *Anat Sci Int.* 2005 Mar;80(1):37-41. Related Articles, Links
2. Nykjaer A, Willnow TE, Petersen CM. p75(NTR) -- live or let die. *Curr Opin Neurobiol.* 2005 Feb;15(1):49-57. Related Articles, Links
3. Linggi MS, Burke TL, Williams BB, Harrington A, Kraemer R, Hempstead BL, Yoon SO, Carter BD. Neurotrophin Receptor Interacting Factor (NRIF) Is an Essential Mediator of Apoptotic Signaling by the p75 Neurotrophin Receptor. *J Biol Chem.* 2005 Apr 8;280(14):13801-8. Epub 2005 Jan 24.
4. Allen J, Khwaja F, Djakiew D. Gene therapy of prostate xenograft tumors with a p75NTR lipoplex. *Anticancer Res.* 2004 Sep-Oct;24(5A):2997-3003.

For users who may require large amounts of the products listed above, please inquire about bulk material discounts.

This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.